CLAIMS

1. An ink composition, comprising:

about 5 to about 50 percent by weight of at least one optically variable pigment;

at least one binder; and

water, wherein:

said at least one optically variable pigment and said at least one binder are combined with said water to form a water-based ink;

said water-based ink is formulated to enable said water-based ink to be used in flexographic printing processes; and

said water-based ink has a viewing angle dependent color shift between at least a first color and a second color.

2. The ink composition as claimed in claim 1 wherein said at least one optically variable pigment comprises about 10 to about 20 percent by weight of said water-based ink.

3. The ink composition as claimed in claim 1 wherein said optically variable pigment comprises a mica substrate, at least one titanium dioxide layer, and at least one inorganic coloring layer.

4. The ink composition as claimed in claim 1 wherein said optically variable pigment comprises a Dynacolor® pigment.

5. The ink composition as claimed in claim 4 wherein said optically variable pigment comprises Mearlin Dynacolor BY-B.

6. The ink composition at claimed in claim 4 wherein said optically variable pigment comprises Mearlin Dynacolor GY.

7. The ink composition as claimed in claim 4 wherein said optically variable pigment comprises Mearlin Hi-Lite Super Gold.

8. The ink composition as claimed in claim 1 wherein said water comprises about 70 to about 80 percent by weight of said water-based ink.

9. The ink composition as claimed in claim 1 wherein said optically variable pigment comprises about 20 by weight of said water-based ink.

10. The ink composition as claimed in claim 1 wherein said at least one binder comprises at least one water soluble polymer.

11. The ink composition as claimed in claim 10 wherein said at least one binder further comprises polyvinyl alcohol.

12. The ink composition as claimed in claim 10 wherein said water soluble polymer comprises polyvinyl pyrollidone.

13. The ink composition as claimed in claim 10 wherein said water soluble polymer comprises carboxymethyl cellulose.

14. The ink composition as claimed in claim 1 wherein said binder comprises at least one latex polymer.

15. The ink composition as claimed in claim 14 wherein said binder further comprises polyvinyl alcohol.

16. The ink composition as claimed in claim 1 further comprising at least one fluorescent dye.

17. A method of providing security information, comprising:

providing a water-based ink comprising:

about 5 to about 50 percent by weight of at least one optically variable pigment;

at least one binder; and

water;

printing at least a portion of a substrate with said water-based ink utilizing flexographic printing, wherein:

said portion of said substrate printed with said water-based ink displays a viewing angle dependent color shift between at least a first color and a second color;

said portion of said substrate printed with said water-based ink comprises security information; and

said security information is not reproducible via photocopying.

18. The method as claimed in claim 17 wherein said at least one optically variable pigment comprises about 10 to about 20 percent by weight of said water-based ink.

19. The method as claimed in claim 17 wherein said substrate comprises a paper substrate.

20. The method as claimed in claim 17 wherein said substrate comprises a plastic substrate.

21. The method as claimed in claim 17 wherein said substrate comprises a security document.

22. The method as claimed in claim 21 wherein said security document is selected from a check, a money order, a certificate, an auto title, a bearer bond, a stamp, a postal order, and a lottery tickets.

23. The method as claimed in claim 21 wherein said security document comprises a check.

24. The method as claimed in claim 17 further comprising printing said substrate utilizing laser printing subsequent to printing at least a portion of said substrate with said water-based ink wherein said security information remains intact during said laser printing.

25. The method as claimed in claim 17 wherein said water-based ink is printed on said substrate such that said substrate is spot-coated.

26. The method as claimed in claim 17 wherein said water-based ink is printed on said substrate such that said substrate is flood coated.

27. The method as claimed in claim 17 wherein said water-based ink is printed on said substrate such that at least one indicia is formed thereon.

28. A method of providing security information, comprising:

providing a water-based ink comprising:

about 10 to about 20 percent by weight of at least one optically variable pigment, wherein said at least one optically variable pigment comprises a Dynacolor® pigment;

at least one binder; and

about 70 to about 80 percent by weight water;

printing at least a portion of a substrate with said water-based ink utilizing flexographic printing, wherein:

said portion of said substrate printed with said water-based ink displays a viewing angle dependent color shift between at least a first color and a second color;

said portion of said substrate printed with said water-based ink comprises security information; and

said security information is not reproducible via a photocopier.

29. A document comprising a document substrate wherein:

at least a portion of said document substrate is printed with a water-based ink utilizing flexographic printing;

said water-based ink comprises about 5 to about 50 percent by weight of at least one optically variable pigment, at least one binder, and water;

said portion of said document substrate printed with said water-based ink displays a viewing angle dependent color shift between at least a first color and a second color;

said portion of said document substrate printed with said water-based ink comprises security information; and

said security information is not reproducible via a photocopier.